



SEQUENCE LISTING

<120> YUAN, Chong-Sheng

<120> DETERMINATION OF IONS USING ION-SENSITIVE ENZYMES

<130> 466992001100

<140> US 10/665,883

<141> 2003-09-19

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<212> PRT

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<223> Chimeric protein

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Met Gly Gly Ser Gly Asp Asp Asp Asp Leu Ala Leu
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20 25 30
Ser Thr Thr Ile Thr Lys Asn Asp Asn Ser Pro Val Thr Thr Gly Asp
35 40 45
Tyr Ala Ala Gln Thr Ile Ile Ile Asn Ala Ile Lys Ser Asn Phe Pro
50 55 60
Asp Asp Lys Val Val Gly Glu Glu Ser Ser Ser Gly Leu Ser Asp Ala
65 70 75 80
Phe Val Ser Gly Ile Leu Asn Glu Ile Lys Ala Asn Asp Glu Val Tyr
85 90 95
Asn Lys Asn Tyr Lys Lys Asp Asp Phe Leu Phe Thr Asn Asp Gln Phe
100 105 110
Pro Leu Lys Ser Leu Glu Asp Val Arg Gln Ile Ile Asp Phe Gly Asn
115 120 125
Tyr Glu Gly Gly Arg Lys Gly Arg Phe Trp Cys Leu Asp Pro Ile Asp
130 135 140
Gly Thr Lys Gly Phe Leu Arg Gly Glu Gln Phe Ala Val Cys Leu Ala
145 150 155 160
Leu Ile Val Asp Gly Val Val Gln Leu Gly Cys Ile Gly Cys Pro Asn
165 170 175
Leu Val Leu Ser Ser Tyr Gly Ala Gln Asp Leu Lys Gly His Glu Ser

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Pro	Ser	Ser	Asp	Ala	Glu	Ser	Trp	Thr	Lys	Ile	His	Val	Arg	His	Leu		
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Lys	Asp	Thr	Lys	Asp	Met	Ile	Thr	Leu	Glu	Gly	Val	Glu	Lys	Gly	His		
225					230				235						240		
Ser	Ser	His	Asp	Glu	Gln	Thr	Ala	Ile	Lys	Asn	Lys	Leu	Asn	Ile	Ser		
			245						250					255			
Lys	Ser	Leu	His	Leu	Asp	Ser	Gln	Ala	Lys	Tyr	Cys	Leu	Leu	Ala	Leu		
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Gly	Leu	Ala	Asp	Val	Tyr	Leu	Arg	Leu	Pro	Ile	Lys	Leu	Ser	Tyr	Gln		
	275						280					285					
Glu	Lys	Ile	Trp	Asp	His	Ala	Ala	Gly	Asn	Val	Ile	Val	His	Glu	Ala		
	290					295				300							
Gly	Gly	Ile	His	Thr	Asp	Ala	Met	Glu	Asp	Val	Pro	Leu	Asp	Phe	Gly		
305					310				315						320		
Asn	Gly	Arg	Thr	Leu	Ala	Thr	Lys	Gly	Val	Ile	Ala	Ser	Ser	Gly	Pro		
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Arg	Glu	Leu	His	Asp	Leu	Val	Val	Ser	Thr	Ser	Cys	Asp	Val	Ile	Gln		
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 35 40 45
 Thr Lys Asn Asp Asn Ser Pro Val Thr Thr Gly Asp Tyr Ala Ala Gln
 50 55 60
 Thr Ile Ile Ile Asn Ala Ile Lys Ser Asn Phe Pro Asp Asp Lys Val
 65 70 75 80
 Val Gly Glu Glu Ser Ser Ser Gly Leu Ser Asp Ala Phe Val Ser Gly
 85 90 95

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Phe	Leu	Arg	Gly	Glu	Gln	Phe	Ala	Val	Cys	Leu	Ala	Leu	Ile	Val	Asp
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Gly	Val	Val	Gln	Leu	Gly	Cys	Ile	Gly	Cys	Pro	Asn	Leu	Val	Leu	Ser
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Ser	Tyr	Gly	Ala	Gln	Asp	Leu	Lys	Gly	His	Glu	Ser	Phe	Gly	Tyr	Ile
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Phe	Arg	Ala	Val	Arg	Gly	Leu	Gly	Ala	Phe	Tyr	Ser	Pro	Ser	Ser	Asp
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225					230					235					240
Asp	Met	Ile	Thr	Leu	Glu	Gly	Val	Glu	Lys	Gly	His	Ser	Ser	His	Asp
			245						250					255	
Glu	Gln	Thr	Ala	Ile	Lys	Asn	Lys	Leu	Asn	Ile	Ser	Lys	Ser	Leu	His
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Leu	Asp	Ser	Gln	Ala	Lys	Tyr	Cys	Leu	Leu	Ala	Leu	Gly	Leu	Ala	Asp
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Val	Tyr	Leu	Arg	Leu	Pro	Ile	Lys	Leu	Ser	Tyr	Gln	Glu	Lys	Ile	Trp
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Asp	His	Ala	Ala	Gly	Asn	Val	Ile	Val	His	Glu	Ala	Gly	Gly	Ile	His
305					310					315					320
Thr	Asp	Ala	Met	Glu	Asp	Val	Pro	Leu	Asp	Phe	Gly	Asn	Gly	Arg	Thr
			325						330					335	
Leu	Ala	Thr	Lys	Gly	Val	Ile	Ala	Ser	Ser	Gly	Pro	Arg	Glu	Leu	His
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Asp	Leu	Val	Val	Ser	Thr	Ser	Cys	Asp	Val	Ile	Gln	Ser	Arg	Asn	Ala
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Lys	Gly	Glu	Leu	Glu	Gly	Leu	Pro	Ile	Pro	Asn	Pro	Leu	Leu	Arg	Thr
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